

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 88-122

SITE CLEANUP REQUIREMENTS AND RESCISSION OF  
ORDER NO. 87-1 FOR:

HEWLETT PACKARD COMPANY  
333 LOGUE AVENUE SITE  
MOUNTAIN VIEW  
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Hewlett Packard Company (hereinafter called the discharger) owns the property located at 333 Logue Avenue, Mountain View, Santa Clara County. The Board adopted Order No. 87-1 on January 21, 1987. This Order supersedes Order No. 87-1 due to changed conditions.
2. The discharger has occupied the site since 1965. Manufacturing activities, consisting of a machine shop, paint booth, and degreasers, were conducted at the site from 1965 until 1981. The hazardous materials used in this operation included: trichloroethene (TCE), tetrachloroethene (PCE), acetone, and freons.
3. A 500 gallon underground waste solvent storage tank was installed in 1972. The tank was taken out of service in 1978 and filled with water. In 1982 the tank was cleaned and filled with concrete.
4. Subsurface investigations were initiated by the discharger in June 1983. The investigations revealed volatile organic chemical (VOC) pollution, principally PCE and TCE, in both soil and groundwater in vicinity of the underground waste solvent storage tank.
5. Subsequent to the initial investigation, the discharger has undertaken follow-up investigations to further define the extent of pollution, as well as to identify other potential pollution source areas. These investigations indicate that two loading docks located onsite are also pollution source areas possibly due to spillage during unloading. These investigations have also identified potential upgradient and downgradient sources of pollution.
6. Remedial actions to date include the installation of a groundwater and vapor extraction and treatment system to contain and cleanup the groundwater and soil pollution.
7. The Regional Board adopted a revised Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region on December 17, 1986. The Basin Plan contains water quality objectives and beneficial uses for South San Francisco Bay and contiguous surface and groundwaters.

8. The existing and potential beneficial uses of the groundwater underlying and adjacent to the site include:
  - a. Municipal and Domestic Supply
  - b. Industrial Process Supply
  - c. Industrial Service Supply
  - d. Agricultural Supply
9. The discharger has caused or permitted, and threatens to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
10. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
11. The Board has notified the discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity to submit their written views and recommendations.
12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 and 13267 of the California Water Code, that the discharger shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharger shall conduct monitoring activities as needed to define the local hydrogeological conditions, and the lateral and vertical extent of soil and groundwater pollution. Should monitoring results show evidence of plume migration, additional plume characterization may be required.

C. PROVISIONS

1. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program prescribed by or amended by the Board's Executive Officer.
2. The discharger shall comply with Prohibitions A.1, A.2, and A.3, and Specifications B.1 and B.2 in accordance with the following time schedule and tasks:

a. **COMPLETION DATE:** November 1, 1988

**TASK: PROPOSED FINAL GROUNDWATER CLEANUP OBJECTIVES**

Submit a technical report acceptable to the Executive Officer containing the results of the remedial investigation; an evaluation of the installed interim remedial measures; a feasibility study evaluating alternative final remedial measures necessary to achieve final groundwater cleanup objectives; and the tasks and time schedule necessary to implement the recommended final remedial measures.

3. The submittal of technical reports evaluating interim and final groundwater remedial measures will include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each alternative measure. The remedial investigation and feasibility study shall consider the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300); Section 25356.1 (c) of the California Health and Safety Code; CERCLA guidance documents with reference to Remedial Investigation, Feasibility Studies, and Removal Actions; and the State Water Resource Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California."
4. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted monthly to the Board commencing on August 10, 1988 and covering the previous month. On a monthly basis thereafter, these reports shall consist of a letter report that, (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and (3) includes, in the event of non-compliance with the Provisions of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on compliance with the remaining requirements of this Order.
5. Quarterly technical monitoring reports on compliance with the Prohibitions, Specifications and Provisions of this Order shall be submitted to the Board commencing on October 30, 1988. These reports shall evaluate the adequacy of plume containment measures to

prevent further significant migration of pollutants and to achieve the removal of pollutants from the groundwater to meet cleanup objectives. Such evaluations shall include an estimation of the capture zones of extraction wells, verification of the cones of depression by field measurements, and presentation of chemical monitoring data from monitoring wells. Specific corrective measures shall be proposed in the event of non-compliance with plume containment and cleanup objectives.

6. If the discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the discharger shall promptly notify the Executive Officer and the Board may consider revision to this Order.
7. All hydrogeologic plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist or professional engineer.
8. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
9. The discharger shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
10. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order shall be provided to the following agencies:
  - a. Santa Clara Valley Water District
  - b. Santa Clara County Health Department
  - c. City of Mountain View
  - d. State Department of Health Services/TSCD
  - e. State Water Resources Control Board
  - f. EPA Region 9

The Executive Officer may additionally require copies of correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order to be provided to a local repository for public use.

11. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:
  - a. Entry upon the premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
  - b. Access to copy any records required to be kept under the terms and conditions of this Order.

- c. Inspection of any monitoring equipment or methodology implemented in response to this Order.
  - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
12. The discharger shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order.
13. If any hazardous substance is discharged in or on any waters of the State, or discharged and deposited where it is, or probably will be discharged in or on any waters of the State, the discharger shall report such discharge to this Regional Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-business hours. A written report shall be filed with the Regional Board within 5 working days and shall contain information relative to: the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention, Control, and Counter-measure Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons/agencies notified.
14. Order No. 87-1 is hereby rescinded.
15. The Board will review this Order periodically and may revise the requirements when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 20, 1988.



STEVEN R. RITCHIE  
EXECUTIVE OFFICER

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

HEWLETT PACKARD COMPANY

333 LOGUE AVENUE FACILITY

MOUNTAIN VIEW, SANTA CLARA COUNTY

ORDER NO. 88-122

CONSISTS OF

PART A, dated December 1986 and modified January 1987, including  
Appendices A through E.

PART B, Adopted: July 20, 1988.

PART B

HEWLETT PACKARD COMPANY  
333 LOGUE AVENUE FACILITY  
MOUNTAIN VIEW, SANTA CLARA COUNTY

I. DESCRIPTION OF SAMPLING STATIONS

A. GROUND WATER

<u>Stations</u>	<u>Description</u>
Hewlett Packard monitoring wells:  W1, W5A, W5B, W6, W6B1, W7, W8A, W8B, W8B1, W9, W10, W11, W12, W13, W14, W15, W16, W17, W18, W35, W36, W37, W39, W40, W41, W42	Ground water monitoring wells
Hewlett Packard extraction wells:  E1, E2, E3, E4, E5, E6	Ground water extraction wells

II. SCHEDULE OF SAMPLING AND ANALYSIS

- A. The schedule of sampling and analysis shall be that given in Table I (attached).

III. MISCELLANEOUS REPORTING

None

IV. MODIFICATIONS TO PART A

A. Deletions:

Section D - SPECIFICATIONS FOR SAMPLING AND ANALYSES

Section E - STANDARD OBSERVATIONS

B. Modifications:

G.4 - Written reports under G.4 shall be filed each calender quarter, once in January, April, July, and October.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with site cleanup requirements established in Regional Board Order No. 88-122.
2. Was adopted by the Board on July 20, 1988.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer or Regional Board.



STEVEN R. RITCHIE  
EXECUTIVE OFFICER

Attachment: Table I



TABLE 1

## SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

SAMPLING STATION	W5A, W7, W11, W15, W16, W18, W36	W5B, W6, W6B1, W8A, W8B, W8B1, W10, W12, W14, W17, W35, W37, W39, W40, W41	W1, W9, W13	E1, E2, E3, E4, E5, E6	W5A, W5B, W8A, W8B, W10
TYPE OF SAMPLE	G	G	G	G	G
EPA METHOD 8010, INCLUDES FREON 113	Q	2/Y	Y	Q	
EPA METHOD 8240 OR 8010 WITH SECOND COLUMN CONFIRMATION, INCLUDES FREON 113	Y	Y	Y		
EPA METHOD 8040					Y
EPA METHOD 8240				Y	
WELL WATER LEVEL	M	M	M		

LEGEND FOR TABLE

G = Grab Sample  
 Q = Quarterly Sample  
 M = Monthly  
 Y = Yearly  
 2/Y = Twice Per Year